

What I claim as my invention is:

1. A binder comprising:
  - a. a ring assembly comprising an elongated frame having a lengthwise axis with at least two split rings spaced apart axially on said frame, said frame having opposite top and bottom ends;
  - b. a solid, single layer, plastic sheet of substantially uniform thickness across its entire area, said sheet having a length direction and a height direction and including two score line depressions spaced apart along said length direction and extending transversely across said sheet in said height direction and defining between them an elongated inner spine portion, and a front cover and a rear cover on opposite sides of said inner spine portion, said elongated inner spine portion having an inside surface and an opposite outside surface and opposite top and bottom ends;
  - c. an elongated outer spine member having an inner surface and a non-planar outer surface;
  - d. said frame of said ring assembly positioned adjacent said inside surface of said inner spine portion and said outer spine member positioned adjacent said outside surface of said inner spine portion;
  - e. said outer spine member, said inner spine portion and said frame each having a central longitudinal axis, these three elements being positioned to overlie each other with their central longitudinal axes in general alignment; and

- f. means for securing together said outer spine member, said inner spine portion and said frame, as positioned.

2. A binder comprising:

- a. a ring assembly comprising an elongated frame having a lengthwise axis with at least two split rings spaced apart axially on said frame and at least two holes extending through said frame transversely of said axis and axially spaced apart from each other, said frame having opposing top and bottom ends;
- b. a solid, single layer, plastic of substantially uniform thickness across its entire area, said sheet having a length direction and a height direction and including two score line depressions spaced apart along said length direction and extending transversely across said sheet in said height direction and defining between them an elongated inner spine portion, and a front cover and a rear cover on opposite sides of said inner spine portion, said elongated inner spine portion having an inside surface and an opposite outside surface and opposite top and bottom ends, said inside surface positioned adjacent to said frame and having at least two axially spaced apertures that correspondingly align with said holes in said frame of said ring assembly;
- c. an elongated outer spine member having an inner surface and a non-planar outer surface, said outer spine member positioned adjacent said outside surface of said inner spine portion, including at least two

axially spaced apertures that correspondingly align with said apertures in said inner spine portion; and

- d. at least two fasteners, each fastener extending through one of said apertures in said outer spine member, through said correspondingly aligned aperture in said inner spine portion, through said correspondingly aligned hole in said frame, and adapted to secure together said outer spine member, said inner spine portion, and said frame, as positioned.

3. A binder comprising:

- a. a ring assembly comprising an elongated frame having a lengthwise axis with at least two split rings spaced apart axially on said frame and at least two holes extending through said frame transversely of said axis and axially spaced apart from each other, said frame having opposing ends;
- b. a solid, single layer, plastic sheet of substantially uniform thickness across its entire area, said sheet having a length direction and a height direction and including two score line depressions spaced apart along said length direction and extending transversely across said sheet in said height direction and defining between them an elongated inner spine portion, and a front cover and a rear cover on opposite sides of said inner spine portion, said inner spine portion having an inner surface and an opposite side surface and opposite top and bottom ends,

said inside surface positioned adjacent to said frame and having at least two axially spaced apertures that correspondingly align with said holes in said frame of said ring assembly; and

- c. an elongated outer spine member having an inner surface and a non-planar outer surface and having at least two fasteners extending from said inner surface, said outer spine member positioned adjacent said outside surface of said inner spine portion, each fastener extending from said outer spine member through one of said apertures in said inner spine portion, through said correspondingly aligned hole in said frame, and adapted to secure together said outer spine member, said inner spine portion, and said frame, as positioned.

- 4. The binder of Claim 1 wherein said outer spine member has opposite top and bottom ends and at each of said ends has a flange extending transversely toward said elongated frame and covering each end of said inner spine portion.
- 5. The binder of Claim 1 wherein said outer spine member has opposite top and bottom ends and at each of said ends has a flange dimensioned to extend toward said elongated frame and to conceal each end of said frame.

6. The binder of Claim 1 wherein said outer spine member further comprises at least two axially spaced ribs, each rib extending a predetermined distance from said inner surface toward said inner spine portion.
7. The binder of Claim 1 wherein said outer spine member has opposite top and bottom ends and at each of said ends has a flange extending transversely toward said elongated frame and covering each end of said inner spine portion, said outer spine member further comprises at least two axially spaced ribs, each rib extending a predetermined distance from said inner surface toward said inner spine portion.
8. The binder of Claim 1 wherein the ring assembly has three split rings, each spaced apart axially from the others on said frame.
9. The binder of Claim 1 wherein the front cover has an inside surface and an opposite outside surface, and at least said outside surface of said front cover is textured.
10. The binder of Claim 1 wherein the rear cover has an inside surface and an opposite outside surface, and at least said outside surface of said rear cover is textured.

11. The binder of Claim 3 wherein the outer spine member is formed by injection molding, and said fasteners comprise projections extending from said inner surface of said outer spine portion and integrally molded therewith.
12. The binder of Claim 3 wherein each said fasteners has a terminal end that projects through said frame and dimensioned to prevent withdrawal from said frame.
13. The binder of Claim 7 wherein the outer spine member is formed by injection molding, and said ribs are integrally molded with said outer spine member.
14. The binder of Claim 3 wherein each said fastener extending through said hole in said frame has a terminal end which is deformed to have a diameter greater than the diameter of said hole in said frame to secure together said outer spine member, said inner spine portion and said frame of said ring assembly.
15. The binder of Claim 1 wherein said outer surface of said outer spine member is convexly curved outwardly.
16. A binder comprising:
  - a. a ring assembly comprising an elongated frame having a lengthwise axis with at least two split rings spaced apart axially on said frame, said frame having opposite top and bottom ends;

- b. a solid, single layer, plastic sheet of substantially uniform thickness across its entire area except for any depressions in its surface, said sheet having a length direction and a height direction and including two score line depressions spaced apart along said length direction and extending transversely across said sheet in said height direction and defining between them an elongated inner spine portion, and a front cover and a rear cover on opposite sides of said inner spine portion, said elongated inner spine portion having an inside surface and an opposite outside surface and opposite top and bottom ends;
- c. an elongated outer spine member having an inner surface and a non-planar outer surface;
- d. said frame of said ring assembly positioned adjacent said inside surface of said inner spine portion and said outer spine member positioned adjacent said outside surface of said inner spine portion;
- e. said outer spine member, said inner spine portion and said frame each having a central longitudinal axis, these three elements being positioned to overlie each other with their central longitudinal axes in general alignment; and
- f. means for securing together said outer spine member, said inner spine portion and said frame, as positioned.

17. A method of making a binder comprising:
- a. providing a ring assembly comprising an elongated frame having a lengthwise axis with at least two split rings spaced apart axially on said frame and at least two holes extending through said frame transversely of said axis and axially spaced apart from each other;
  - b. providing a continuous sheet of solid, single layer, plastic having a length direction and a height direction and having an initial uniform thickness over its entire area;
  - c. forming two score line depressions on said sheet spaced apart along said length direction and extending transversely across said sheet in said height direction and defining between them an inner spine and a front cover and a rear cover on opposite sides of said inner spine portion, said inner spine portion having an inside surface and an opposite outside surface;
  - d. forming at least two apertures in the inner spine portion, having centers spaced apart the same distance as said holes in said frame and correspondingly aligned with said holes in said frame;
  - e. providing an elongated, injection molded outer spine member having an inner surface and a non-planar outer surface and including at least two fastening elements integrally molded therewith, said fastening elements having terminal ends and having centers spaced apart the same distance as said apertures in said inner spine portion and correspondingly aligned with said apertures of said inner spine portion;



- f. positioning said ring assembly to overlie said inner surface of said inner spine portion and aligning said apertures and said holes;
- g. positioning said outer spine member to overlie said outer surface of said inner spine portion;
- h. inserting said fastening elements through said aligned apertures in said inner spine portion and said aligned holes in said frame of said ring assembly with said terminal ends projecting through said frame; and
- i. deforming said terminal ends of said fastening elements, thereby binding together said ring assembly, inner spine portion and outer spine member.

18. A method of making a binder comprising:

- a. providing a ring assembly comprising an elongated frame having a lengthwise axis and a central longitudinal axis with at least two split rings spaced apart axially on said frame;
- b. providing a continuous sheet of solid, single layer, plastic having a length direction and a height direction and having an initial uniform thickness over its entire area;
- c. forming two score line depressions on said sheet spaced apart along said length direction and extending transversely across said sheet in said height direction, defining between them an inner spine portion with a central longitudinal axis and a front cover and a rear cover on opposites sides of

said inner spine portion, said inner spine portion having an inside surface and an opposite outside surface;

- d. providing an elongated, injection molded outer spine member having a central longitudinal axis and an inner surface and a non-planar outer surface;
- e. positioning said ring assembly to overlie said inner surface of said inner spine portion;
- f. positioning said outer spine member to overlie said outer surface of said inner spine portion;
- g. aligning each of said central longitudinal axes of each of said ring assembly, said inner spine portion and said outer spine member;
- h. providing means for securing together said ring assembly, inner spine portion and outer spine member; and
- i. securing together said ring assembly, inner spine portion and outer spine member, as positioned.